

SHAVLO, Sergey Grigor'yevich; SERGIYEV, N.G., otv.red.; SEMENOV, M.N.,  
red.; ALFEROVA, P.F., tekhn.red.

[Pegmatites and hydrothermal deposits in the Kalba Range]  
Pegmatity i gidrotermalnye Kalbinskogo khrepta. Alma-Ata,  
Izd-vo Akad.nauk Kazakhskoi SSR, 1958. 326 p. (MIRA 12:6)  
(Kalba Range--Petrology)

SHAVLO, S.G.

Formation of Kalba and Narym pegmatites. Trudy Alt. GMNII AN  
Kazakh.SSR 6:40-64 '58. (MIRA 12:1)  
(Kalba Range--Pegmatites) (Narym Range--Pegmatites)

SHAVLO, S.G.

Justification of prospects for rare elements in the Kalba Range.  
Trudy Alt. GMNII AN Kazakh. SSR 9:50-54 '60. (MIRA 14:6)

1. Altayskiy gornometallurgicheskiy nauchno-issledovatel'skiy  
institut AN Kazakhskoy SSR.  
(Kalba Range--Rare earth metals)

BEL'SKIY, G.V.; SHAVLO, S.G.

Some regularities in the distribution of metallic elements in  
rocks of the central Kalba. Uzb.geol.zhur. no.5:43-49 '61.

1. Institut geologii AN Uzbekskoy SSR.  
(Kalba Range--Metals)

AKRAMKHODZHAYEV, A.M.; AKHMEDZHANOV, M.A.; BABAYEV, A.G.; BARAYEV, K.L.;  
BATALOV, A.B.; BASHAYEV, N.P.; BAYMUKHAMEDOV, Kh.N.; BRAGIN,  
K.A.; BORISOV, O.M.; GABRIL'YAN, A.Sh.; GAR'KOVETS, V.G.;  
GOR'KOVOY, O.P.; GRIGORYANTS, S.V.; IBADULLAYEV, S.I.; ISMAILOV,  
M.I.; ISAMUKHAMEDOV, I.M.; KAKHKHAROV, A.; KENESARIN, N.A.;  
KRYLOV, M.M.; KUCHUKOVA, M.S.; LORDKIPANIDZE, L.N.; MAVLYANOV,  
G.A.; MOTSOKINA, T.H.; MALAKHOV, A.A.; MIRBABAYEV, M.Yu.;  
MIRKHODZHIYEV, I.M.; MUSIN, R.A.; NABIYEV, K.A.; PETROV, N.P.;  
POPOV, V.I.; PLATONOVA, N.A.; RYZHKOV, O.A.; SAYDALIYEVA, M.S.;  
SERGUN'KOVA, O.I.; SLYADNEV, A.F.; TULYAGANOV, Kh.T.; UKLONSKIY,  
A.S.; KHAMRABAYEV, I.Kh.; KHODZHIBAYEV, N.N.; CHUMAKOV, I.D.;  
SHAVLO, S.G.

Khabib Mukhamedovich Abdullaev; obituary. Uzb.geol.zhur. 6  
no.4:7-9 '62. (MIRA 15:9)  
(Abdullaev, Khabib Mukhamedovich, 1912-1962)

SHAVLO, S.G.

Rare and trace elements in the rare-metal formations of the  
Kalba and Narym Ranges. Zap. Uz. otd. Vses. min. ob-va no.14:  
70-77 '62. (MIRA 16:7)

(Kalba Range--Trace elements)  
(Narym Range--Trace elements)  
(Kalba Range--Metals, Rare and minor)  
(Narym Range--Metals, Rare and minor

SHAVLO, S.G.

Localization of rare-metal ores depending on the morphology,  
structure, and texture of vein bodies. Uzb. geol. zhur. 7  
no.4:69-72 '63. (MIRA 16:10)

1. Institut geologii imeni KhM. Abdullayeva AN UzSSR.  
(Metals, rare and minor)

CHIVIN, N.G., doktor geol.-min. nauk, prof., chv. red.; MULCHIKHANOV,  
N.V., red.

[Minerals of Uzbekistan and problems of their genesis] Po-  
leznye iskopayemye Uzbekistana i voprosy ikh genezisa.  
Tashkent, izdat. "Nauka Uzbekskoi SSR," 1964. 163 p.  
(NURA 17:7)

I. tchast: typi misk Uzbekskoy SSR, Tashkent. otdeleniye geo-  
logicheskikh nauk.

UKLONSKIY, A.S., akademik, otd. red.; BADALOV, S.T., doktor geol.-min. nauk, red.; GLOVANOV, I.M., kand. geol.-miner. nauk, red.; KHALICOV, I.I., kand. geol.-ingr. nauk, red.; TAIKHOV, A.A., doktor geol.-miner. nauk, red.; SHAVLO, S.G., doktor geol.-miner. nauk, red.; ASIAKHOV, A.N., Fedr.

[Problems of mineralogy and geochemistry] Voprosy minera-  
logii i geokhimii. Tashkent, Izd-vo Nauka, Uzbek.SSR,  
1962. 278 p. (MIRA 17:8)

1. Akademiya nauk Uzbekskoy SSR, Tashkent. Institut geo-  
logii i geofiziki. 2. Akademiya nauk Uzb.SSR (for Uklonskiy).

MAVLYANOV, G.A., alimler ik, otv. red.; AKRAMKHODZHAYEV, A.M., red.; KINESARIN, N.A., red.; KHAKRABAYEV, I.Kh., doktor geol.-miner. nauk, red.; SHAVIC, S.G., doktor geol.-miner. nauk, red.; PETROV, N.P., kand. geol.-miner. nauk, red.; SPEKTOR, L.Ye., red.

[Problems of the geology and minerals of Uzbekistan; papers of the geologists of Uzbekistan for the 22d. Session of the International Geological Congress in 1964] Problemy geologii i poleznykh iskopaemykh Uzbekistana; trudy geologov Uzbekistana k XXII sessii Mezhdunarodnogo geologicheskogo kongressa 1964.g. Tashkent, Nauka UzSSR, 1964. 194 p. (RLA 18:1)

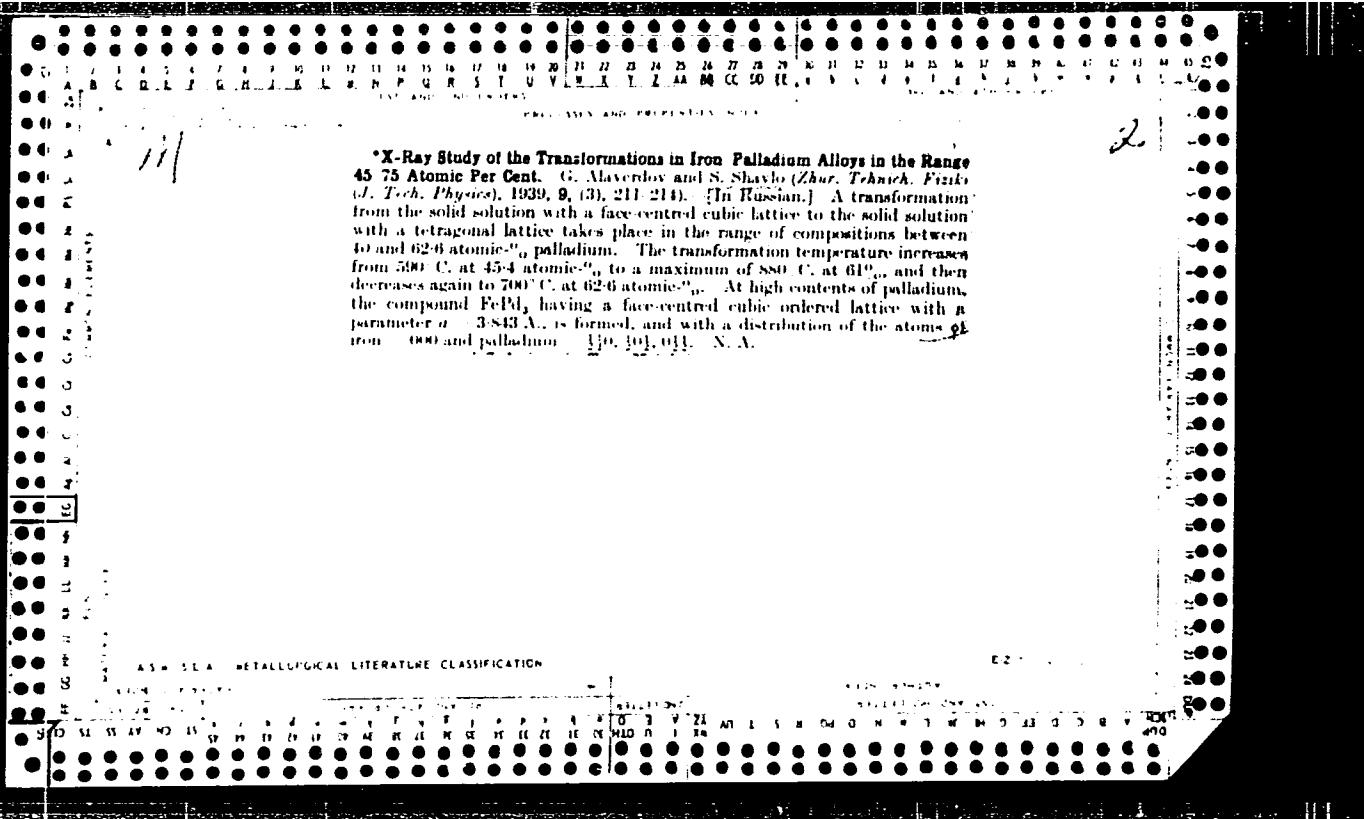
1. Akademiya nauk Uzbekskoy SSR, Tashkent. Institut geologii i geofiziki. 2. Akademiya nauk Uzbek. (for Mavlyanov, Kenesarin). 3. Chlen-korrespondent Akademii nauk Uzbek.SSR (for Akramkhodzhayev).

DZHAMELTDINOV, N.K.; SHAVLO, S.G.

Relation of pegmatites of the Lolabulak-Ketmenchinsk zone to the  
various phases of intrusive igneous activity (western Uzbekistan).  
Uzb. geol. zhur. 9 no. 6:47-53 '65 (MIRA 19:1)

1. Institut geologii i geofiziki imeni Abdullayeva AN UzSSR.  
Submitted August 10, 1964.

X-ray study of the orienting process in the  $\beta$ -phase of  
the silver-zinc alloy with 50.3 atomic percent zinc. P. I.  
Shavlo and G. A. Alaverdov. *J. Appl. Physic. Phys.*  
(U. S. S. R.) 9, 59 (1959). As shown by Debye x-ray  
photographs the orienting process of the  $\beta$ -phase Ag-Zn  
alloy to the  $\beta'$ -phase is complete when quenched from  
260°, but when quenched from 380° in 10% NaOH, an  
alternating structure, intermediate phase is obtained.  
This is completely converted to the  $\beta'$  phase on heating  
to 200°. F. H. Rathmann



Production of large ionic currents. II. M. I. Korsunski and S. T. Shavlo (*J. Physics U.S.S.R.*, 1940, **8**, 385-392).— Conditions have been examined for the formation of ions due to ionisation by electrons in a gas at such pressures that the free path of the electrons is > the distance between the electrodes. The dependence of the ionic current on potential at const. pressure, accelerating potential and grid potential, and the dependence on gas pressure, have been determined. The effect of pressure on ionic current is complicated; there exists a limiting pressure above which it is possible to get a very large ionic current. In the neighbourhood of this the discharge becomes very unstable. There is an oscillatory motion of electrons between the electrodes. With suitable parameters, the probability of ionisation is so great that the no. of ions generated per electron is >1. A. J. M.

OPEN

CLOSED

AS-SEA METALLURGICAL LITERATURE CLASSIFICATION

E-Z FILE INDEX

CLASS NUMBER	SEARCHED	FILED	OPEN	CLOSED	SEARCHED	FILED	OPEN	CLOSED
500-599	Y	Y	Y	Y	Y	Y	Y	Y

... history information &  
Materials

FURTHER EXAMINATION OF THE PRODUCTION OF  
IONS BY ELECTRONS OSCILLATING IN AN ELECTRIC  
FIELD [531 of 1941].—Korsunski & Shayko.  
(*Journ. of Phys. [of USSR]*, No. 3, Vol. 4, 1941,  
pp. 285-286; summary only, in English.)

YEZHIK, I.I.; SHAVLO, S.T.

Dependence of the intensity of infrared and visible luminescence  
on temperature and X-ray time in NaCl, KCl, and KBr crystals. Izv.  
vys.ucheb.zav.; fiz. no.3:62-67 '59. (MIRA 12:10)

1. Khar'kovskiy pedinstitut imeni G.S.Skoverody.  
(Luminescence) (Alkali metal halides--Crystals)

YEZHIK, I.I.; SHAVLO, S.T.

Dielectric losses in X-irradiated alkali halide crystals studied  
at low temperatures on the 3.18 cm. wavelength. Izv. vys. ucheb.  
zav.; fiz. no.4:140-146 '59. (MIRA 13:3)

1. Khar'kovskiy pedinstitut.  
(Alkali halide crystals--Electric properties)

94170

83364

S/139/60/000/004/024/033  
E201/E591AUTHORS: Yezhik, I. I. and Shavlo, S. T.TITLE: Infrared Fluorescence of F-centres and its Mechanism  
in Subtractively Coloured Alkali-Halide Crystals  
Investigated at High TemperaturesPERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika,  
1960, No.4, pp. 190-197TEXT: Infrared fluorescence of subtractively coloured NaCl,  
KCl and KBr crystals, illuminated in the F-centre absorption band,  
was studied between 290-540°K. The authors studied the decay of  
infrared fluorescence and the possibility of infrared emission at  
temperatures producing thermal decomposition of F-centres. Crystals,  
grown by the Kyropoulos method, were coloured by X-ray irradiation  
at low temperatures until F-centre saturation was achieved (Ref.3)  
and then were heated slowly in darkness to room temperature.  
Infrared fluorescence was recorded by means of a photoresistor  
FS-1A and the resultant signal was amplified. A modulating disc  
was placed between a lens which focused the fluorescence and the  
photoresistor. The temperature dependence of the fluorescence

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S/139/60/000/004/024/033  
E201/E591

Infrared Fluorescence of F-centres and its Mechanism in  
Subtractively Coloured Alkali-Halide Crystals Investigated at High  
Temperatures

intensity had maxima at 332, 352, 410 and 445°K for NaCl, at 312 and 361°K for KCl and at 300 and 330°K for KBr (Fig.1).  
Figs. 2-4 show the decay of infrared fluorescence after illumination with light in the F-centre absorption band (Fig.2 refers to NaCl, Fig.3 refers to KCl and Fig.4 refers to KBr). The following conclusions were drawn from the results.

- 1) Thermal excitation and thermal ionization of F-centres (without additional illumination in the F-centre absorption band) did not produce infrared fluorescence at temperatures from 77 to 540°K.
- 2) The observed infrared fluorescence decayed exponentially.
- 3) A photochemical reaction  $F' + h\nu \rightleftharpoons 2F$  occurred in production of infrared fluorescence.
- 4) Potential curves could be used to describe the kinetics of the F-centre infrared fluorescence at high temperatures.
- 5) The infrared fluorescence ceased above 456°K in NaCl, above 372°K in KCl and above 338°K in KBr. Above these temperatures the

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S/139/60/000/004/024/033  
E201/E591

Infrared Fluorescence of F-centres and its Mechanism in  
Subtractively Coloured Alkali-Halide Crystals Investigated at High  
Temperatures

crystals could not be coloured with X-rays.

The authors give a kinetic explanation of production and decay of  
the infrared fluorescence and of the maxima in the temperature  
dependences of the fluorescence intensity. There are 5 figures,  
1 table and 17 references: 11 Soviet and 6 English.

IX

ASSOCIATION: Khar'kovskiy pedinstitut imeni G. S. Skovorody  
(Khar'kov Pedagogical Institute imeni G.S. Skovoroda)

SUBMITTED: June 24, 1959

Card 3/3

85157

S/139/60/000/005/003/031

E073/E135

24.7800

AUTHORS: Yezhik, I.I., Shavlo, S.T.TITLE: On the Dielectric Losses in X-ray Irradiated Crystals  
of NaCl, KCl and KBr Investigated at Elevated  
Temperatures at Wavelength 3.18 cm.PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika,  
1960, No. 5, pp 13-20

TEXT: In earlier work (Ref. 1) the authors investigated the dielectric losses in X-ray irradiated alkali-halide crystals during illumination in the F-absorption band at the frequency  $10^{10}$  c.p.s. in the temperature range -196 to +20 °C. They detected on the  $\text{tg } \delta$  temperature curve maxima in the dielectric losses which for NaCl crystals were located at 220 °K and for KCl crystals were located at 140, 220, 270 and 310 °K, whilst for the KBr crystals they were at 160 and 150 °K. The temperatures of the dielectric loss maxima coincided with the appropriate peaks on the photoluminescence and photoconductivity curves. A kinetic scheme was presented which permits elucidating the cause of maxima on the  $\text{tg } \delta$  curves in the low temperature range.

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85157

S/139/60/000/005/003/031  
E073/E135

On the Dielectric Losses in X-ray Irradiated Crystals of NaCl, KCl and KBr Investigated at Elevated Temperatures at Wavelength 3.18 cm.

In the present paper the dependence of  $\tg \delta$  on the temperature is investigated for X-ray irradiated NaCl, KCl and KBr crystals excited in the F band in the temperature range 290-600 °K at the wavelength 3.18 cm. The relations between the dielectric losses, the luminescence and the photoconductivity are investigated. For measuring the dielectric constant the variational method was used in which the existence of clearances between the specimen and the waveguide wall does not affect appreciably the accuracy of measurement (Ref. 2). This is important due to the fact that the coefficient of linear expansion of the material of the waveguide walls differs from that of the specimen. The specimens were rectangular, with a cross-section equalling that of the waveguide. The crystals were grown according to the Kiropulos method and had a high degree of purity. To obtain as high saturation as possible of the crystals with F-, F<sup>-</sup>, M- and other coloration centres the

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85157

S/139/60/000/005/003/031

E073/E135

On the Dielectric Losses in X-ray Irradiated Crystals of NaCl,  
KCl and KBr Investigated at Elevated Temperatures at Wavelength  
3.18 cm.

specimens were exposed to X-ray radiation at room temperature for 30-40 min and at the liquid nitrogen temperature for 5-10 min. The dependence of  $\tan \delta$  on the temperature was measured after heating a specimen from 77 °K to room temperature. The specimens were stored in darkness. No loss maxima were observed in the curves expressing the dependence of the dielectric losses on the temperature in the temperature range 77 to 600 °K, in alkali halide crystals which were exposed to X-ray radiation and were not excited by light in the F-absorption band at the frequency  $10^{10}$  c.p.s. In the temperature range 77 to 300 °K a monotonous increase in the losses was observed; in the temperature range 300 to 600 °K a progressive increase was observed in the dielectric losses with increasing temperature. The increase in the dielectric losses at elevated temperatures are obviously due to the weakening of the forces of interaction between the ions of the crystal lattice. As a result of that the ions are easily brought into motion by the ultrahigh frequency and absorb energy which results in a still

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85157

S/139/60/000/005/003/031  
E073/E135

On the Dielectric Losses in X-ray Irradiated Crystals of NaCl, KCl and KBr Investigated at Elevated Temperatures at Wavelength 3.18 cm.

greater increase in the losses. For alkali-halide crystals which have been exposed to X-rays, illuminated in the F-absorption band in the range 77 to 600 °K at the wavelength 3.18 cm, dielectric loss maxima were observed on the  $\frac{d\epsilon}{dT}$  vs. temperature curves for the temperatures 200, 350, 410 and 490 °K for NaCl; 140, 220, 270, 310, 320 and 390 °K for KCl; and 160, 250 and 350 °K for KBr.

The temperatures of the maxima of the dielectric losses correspond to the peaks of the curves of the dependence of the infrared, visible and ultraviolet luminescence and photoconductivity on temperature. A part of the observed maxima of the dielectric losses, luminescence peaks and photoconductivity coincides with the temperature of disintegration of F-, F<sup>+</sup>, M- and other coloration centres. In the case that coloured alkali-halide crystals are excited by light in the F-absorption band and heated in the temperature range 77 to 600 °K, maxima of the dielectric losses and peaks in the infrared, visible and ultraviolet luminescence and the photocurrent occur simultaneously. All these phenomena

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X

85157

S/139/60/000/005/003/031  
E073/E135

On the Dielectric Losses in X-ray Irradiated Crystals of NaCl,  
KCl and KBr Investigated at Elevated Temperatures at Wavelength  
3.18 cm.

occur under identical experimental conditions; consequently  
they are caused by a single although complicated mechanism.

There are 3 figures and 18 references: 13 Soviet, 3 English,  
1 Swedish and 1 German.

ASSOCIATION: Khar'kovskiy pedinstitut imeni G.S. Skovorody  
(Khar'kov Pedagogic Institute imeni G.S. Skovoroda)

SUBMITTED: September 24, 1959

Card 5/5

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YEZHIK, I.I.; SHAVLO, S.T.

Role of M-, R-, and F'-color centers in the mechanism of the infrared  
fluorescence of F-centers in alkali-halide crystals. Izv.vys.ucheb.zav.;  
fiz. no.1:46-53 '61. (MIRA 14:7)

1. Khar'kovskiy pedagogicheskiy institut imeni G.S.Skvorody.  
(Color centers) (Alkali metal halides—Crystals)  
(Infrared rays)

21372

Q1.4220 also 1454

S/126/61/011/004/022/023  
E193/E483AUTHORS: Shavlo, S.T. and Kosovitsova, N.A.

TITLE: X-ray and Mechanical Investigation of the Structural Changes in the AgCd (50 at.%) Alloy

PERIODICAL: Fizika metallov i metallovedeniye, 1961, Vol.11, No.4,  
pp.635-638

TEXT: It has been observed by other authors (Ref. 2 and 3) that ordering (the  $\beta \rightarrow \beta'$  transformation), taking place in the AgCd alloy, entails passing of the alloy through an intermediate structure  $\beta_1$ . The object of the present investigation was to determine (by X-ray diffraction analysis) the conditions under which the formation of the  $\beta_1$  phase can take place and to measure the microhardness and U.T.S. of the  $\beta$ ,  $\beta_1$  and  $\beta'$  phases. The experiments were conducted on specimens 0.9 to 1.0 mm in diameter and 20 to 25 mm long, prepared by drawing the molten alloy into porcelain tubes. The results can be summarized as follows.

1. No evidence of the intermediate phase  $\beta_1$  was found in specimens cooled in vacuum from 210 to 18°C in 250 to 300 h. The formation of the  $\beta_1$  phase could be ensured by using a faster rate of cooling (cooling from 210 to 18°C in 20 to 30 h). The disordered

Card 1/2

ACCESSION NR: AP4034068

S/0126/64/017/004/0633/0635

AUTHOR: Shavlo, S. T.

TITLE: Acceleration of the ordering process of atoms and the increase of resistance of metals at cyclical thermal treatment in vacuum

SOURCE: Fizika metallov i metallovedeniya, v. 17, no. 4, 1964, 633-635

TOPIC TAGS: ordering process, beta phase, thermal treatment, silver, zinc, cadmium, radiogram

ABSTRACT: The purpose of this work was to show the significance of accelerating the ordering process of atoms in crystal lattices of AgCd and AgZn alloys by the method of cyclical thermal working in vacuum. Thermal treatment tended to accelerate the diffusion process. The cylindrical test specimens were obtained by drawing the melt through porcelain tubes of 1-1.2 mm diameter and 20-30 mm length. The initial  $\beta$ -phase always had a disordered structure, and it generally took a long time for transformation to the ordered  $\beta'$ -phase without thermal treatment. The AgZn specimen was heated in a furnace to 230C for 10 minutes and then was automatically moved within one minute to a cooler to be chilled to 18C in 25 minutes. The AgCd specimen was heated for 8-9 minutes to 210C and then cooled to 18C in 23 minutes. The temperatures were measured by platinum and platinum-rhodium thermocouples. The Card 1/2

ACCESSION NR: AP4034068

$\beta$  to  $\beta'$  transformation was observed by radiographic equipment. Without vacuum or thermal treatment, the time for ordering in AgCd and AgZn respectively was 200-207 hrs and 230-235 hrs. With vacuum and without thermal treatment these times were 165-167 and 170-175 hrs. With vacuum and with thermal treatment they were 72-74 and 72-74 hrs. Orig. art. has: 1 figure and 2 tables.

ASSOCIATION: Kafedra fiziki Khar'kovskogo sel'skokhozyaystvennogo instituta im. V. V. Dokuchayeva (Department of Physics, Khar'kov Agricultural Institute)

SUBMITTED: 08Mar63

ENCL: 00

SUB CODE: SS, MM

NO REF SOV: 008

OTHER: 007

Card 2/2

SHAVLOKHOV, A.Ye., inzh.

Investigating the performance of pneumatic driven wheels in  
mellow soils. Trakt. i sel'khozmash. 33 no.9:4-6 S '63.  
(MIRA 16:10)  
1. Vsesoyuznyy nauchno-issledovatel'skiy institut mekhanizatsii  
sel'skogo khozyaystva.  
(Agricultural machinery-Wheels)

SHVARTSMAN, B.Kh.; VOLKOVA, N.S.; SHAVLOKHOVA, T.T.; GABILEV, V.Kh.;  
KASHKOVSKIY, M.S.

Industrial testing of the methods of obtaining high-grade  
alumina from nepheline. TSvet. met. 35 no.7:41-45  
Jl '62. (MIRA 15:11)  
(Nepheline) (Alumina)

SHAVLOV, A.

Optical masers. Usp. fiz. nauk 75 no.3:569-582 n 161.  
(Maser 14;11.)  
(Masers)

URAVIAV, V. V.

Compilation of Original Relief Maps of Sections by Means of a Mountain Phototransformer  
Ch. ref Tsentr. n-i. in-ta geod., aeros'zemki i kartogr., No 1, 1954

The method consists in using pictures with drawn parts of relief on which decoded elements are transposed, the transformation points marked, and the whole picture drawn in Chinese ink. This drawing is reproduced on film by contact method and the obtained line negative used for further contact prints which are thereafter processed on the mountain phototransformer by conventional methods. (ZhAstr. No 10, 1955)

SC: Sum-No 787, 12 Jan 56

SHAVLOVICH, M., kand.tekhn.nauk

Everlasting materials "made to order," Tekh.mol. 29  
no.10:22-23 '61. (MIRA 14:10)  
(Concrete) (Polymers)

S/081/62/000/021/051/069  
B162/B101

AUTHOR: Shavlovich, M.

TITLE: Quick-curing polymeric materials

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 21, 1962, 451, abstract  
21P46 (Tekhn. v s. kh. no. 1, 1962, 82-85)

TEXT: Methods of obtaining quick-curing polymeric materials non-reinforced,  
reinforced with metals and with non-metallic reinforcement (polymer-  
concrete, polymer-ceramics, reinforced-polymer-concrete) that are  
suitable for the manufacture of building construction assembly elements,  
machine components and for agriculture are investigated. [Abstracter's  
note: Complete translation.]

Card 1/1

SHAVLOVICH, M. V.

SHAVLOVICH, M. V. -- "The Combined Drying of Capillary-Porous Materials in a High-Frequency Electrical Field at Low Pressure." Min Higher Education USSR. Moscow, 1955. (Dissertation for the Degree of Candidate in Technical Sciences).

So.: Knizhnaya Litopis', No. 7, 1956.

SHAVLOVICH, M., kand.tekhn.nauk, dotsent

Replacing cement concretes. NTO 3 no.2:31-34 F '61. (MIRA 14:3)

1. Kafedra fizkik Moskovskoy sel'skokhozyaystvennoy akademii imeni  
K.A. Timiryazeva.  
(Concrete)

12. \$100  
15 3000

27596  
S/029/61/000/010/111/000  
D037/D113

AUTHOR: Shavlovich, M., Candidate of Technical Sciences

TITLE: Durable materials "on order"

PERIODICAL: Tekhnika molodezhi, no. 10, 1961, 22-23

TEXT: The author describes previous unsuccessful Soviet attempts to produce a satisfactory plastic concrete and proposes a new method of producing this material. Cementless concrete, consisting of dry purified sand, 1.5 - 1.7% furfurole, 18-25% furfurolacetone "FA" monomers as binder and 3.5 - 4.5% m-zosulfinide as hardener, was first produced at Fergana in 1941. This concrete was water- and soundproof and heat, acid and alkali-resistant but was not stronger than cement concrete. Besides, it was too expensive and needed 1-70 days for hardening. Comparatively recently the Moskovskiy khimiko-tehnologicheskiy institut imeni D.I. Mendeleyeva (Moscow Chemical and Technological Institute imeni D.I. Mendeleyev), the institutes of the Akademiya stroitel'stva i arkhitektury SSSR (Academy of Construction and Architecture USSR) and many other scientific research institutes continued the work on it.

Card 1/3

Plastic materials ...

27596  
S/029/61/CIC/CIC/CIC  
DC37/3113 ✓

proving this type of plastic concrete. However, the prime cost of the product was too high and hardening took 50 to 60 days. The author proposes a new method whereby the plastic concrete solution is simultaneously subjected to high-frequency electric and low-frequency mechanical oscillations thus causing an unprecedented rapid polymerization and hardening. The total technological process takes 4 - 4.5 min. In the production of this so-called polymerconcrete, catalysts are not necessary since the variable frequency oscillations destroy the surface microfilm covering the particles of the hard substance. During the "shaking" process, the formerly inert surfaces of the hard particles acquire the properties of stronger catalysts. When the "shaking" is stopped, steady external and internal polymerization begins. This phenomenon is called interphase atomic nuclear superactivity. The polymer molecules form ideally-jointed structures in which the filler particles are completely unified. A monolith of this type hardens within a few minutes, becomes very strong, and can resist a pressure of over 1000 kg per sq cm. Furthermore, polymerconcrete products do not require a metal reinforcement. They are not only superstrong but also durable. The high heat and sound insulating properties of the polymerconcrete, which at the same time is a good

hard 2/3

Durable materials ...

27596  
S/029/61/0C0/01C/C03/C04  
D037/D113

dielectric, and its waterproofness and resistance to aggressive media make it an ideal material suitable for strong thin-walled pipes, large panels, bridges, pylons for high-voltage transmission lines, and containers for gas, acids and alkalis. Polymerconcrete reinforced with glass fillers is stronger than the most resistant steel and will be widely used in machine and machine tool building. The new method makes it possible to produce concrete with pre-imposed properties, without significant changes in the technological cycle. There is 1 figure.

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5 3830

28986  
S/191/61/000/011/002/008  
B110/B147

AUTHOR: Shavlovich, M. V.

TITLE: New trends in the technology of hardening polymer materials

PERIODICAL: Plasticheskiye massy, no. 11, 1961, 13-14

TEXT: For the production of polymers by means of ion (cation) polymerization, compounds of acid character (e.g., organosulfonic acids) are used as catalysts. Their drawback is the fact that they remain in the polymer mass and, in the course of time, unfavorably affect its properties under working conditions (e.g., temperature rise, effect of light, etc.). The possibility of producing, without the use of acid hardeners, polymers prepared so far by means of ion polymerization, is of greatest interest since similar materials are widely used and their application will still increase in the near future. Such valuable compositions as, e.g., plastic concretes (or polymer concretes) belong to these materials. Many resin-impregnated organic and inorganic materials, which are subject to the effect of combined electromechanical oscillations of different frequencies, were found to acquire high-grade technological and operational properties owing to the X

Card 1/8

New trends in the technology of...

20986

S/131/61/000/011/002/006

B110/P-4?

development of an interphase atomic and molecular superactivity. In hardening experiments of plastic concrete on the basis of FA (FA) monomer, performed according to the author's method, the following was found: (1) Hardening may be conducted without the use of acid catalysts. (2) Plastic concrete is hardened several hundred times faster than by other known hardening methods. Basic polymerization takes place within the first minute, and after cooling (15-25 min) the organomineral composition acquires stable mechanical and physicochemical properties. (3) The hardening temperature must lie within the 45-60°C range. (4) The mechanical and physicochemical properties of plastic concretes hardened by the new method are superior to those of ordinary plastic concretes (Table). (5) Due to better distribution of organic binders in the plastic concrete mass, their consumption may be reduced to less than half its original amount without impairing the material indices. (6) As a result of the accelerated hardening process, the savings on binders, and the elimination of hardeners, the cost of plastic concrete manufactured by the new method may be reduced to less than one-third that of the price of plastic concrete manufactured according to the catalyst method. (7) Simplification and acceleration of the hardening process of plastic concrete under the effect of combined

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S/191/61/000/011/002/008

B110/B147

New trends in the technology of...

electromechanical oscillations provide the conditions for the automation of a continuous, accelerated production of building elements and all types of articles from plastic concretes and various plastics. Although the results obtained from the new hardening process are of a preliminary nature, they clearly prove the prospects of the method proposed. In order to clarify all possibilities of this method and give a complete evaluation of the polymers obtained, further theoretical research of the physicochemical processes taking place during accelerated hardening will be required, as well as the establishment of an experimental plant for elaborating the automatic continuous production of fast-hardening polymer concretes and other plastics. [Abstracter's note: Complete translation.] There are 1 table and 3 Soviet references.

Table. Fundamental properties of plastic concretes produced by various methods. Legend: (1) Characteristics. (2) Heating to 60°C with catalyst. (3) Combined heating to 45°C with high-frequency oscillations. (4) Excitation of atomic and molecular superactivity. (5) Type of effect. (6) Time of hardening, hr. (7) Strength limit, kg/cm<sup>2</sup>. (8) On compression. (9) On expansion. (10) On bending. (11) Elongation on expansion, %. (12)

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B110/B147

New trends in the technology of...

Specific impact strength,  $\text{kg}\cdot\text{cm}\cdot\text{cm}^2$ . (13) Brinell hardness,  $\text{kg}/\text{mm}^2$ . (14)  
Coefficient of linear expansion,  $10^{-5}$   $\text{cm}/\text{deg}$ . (15) Thermal conductivity,  
 $10^{-4}$   $\text{cal}/\text{cm}\cdot\text{sec deg}$ . (16) Heat resistance according to Martens by a  
method altered by the author,  $^{\circ}\text{C}$ . (17) Disruptive voltage,  $\text{kV}/\text{mm}$ . (18)  
Stability in aggressive media. (19) In  $\text{H}_2\text{SO}_4$ ,  $\text{HCl}$ , and other acids.  
(20) In alkalis. (21) In mineralized water. (22) In oils and gasoline. X  
(23) Capillary suction. (24) Color of hardened mass. (25) Smell of  
hardened mass. (26) Color change of hardened mass under intense solar  
radiation. (27) Reduction of mechanical strength during heating to  
 $350-450^{\circ}\text{C}$ , %. (28) Test for frost resistance in 100 cycles from -45 to  
 $-350-450^{\circ}\text{C}$ . (29) Stable. (30) None. (31) Dark gray. (32) Slight  
resinous smell. (33) Gray. (34) Light gray. (35) Without smell.  
(36) No color change. (37) Slight yellow coloring. (38) The material  
became unserviceable during the last test stage. (39) Properties hardly  
change. (40) Properties do not change.

Card 4/5

S/081/62/000/005/103/112  
3166/P101

AUTHOR: Shavlovich, M. V.

1C

TITLE: New high-strength polymeric waterproofing materials

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 5, 1962, 609-610,  
abstract 5P48 (Gidrotekhn. i melioratsiya) 3 no. 6, 1961,  
47-50)

TEXT: The use of electromechanical polyresonance oscillations of various frequencies makes it possible to obtain quick-hardening, high-strength, waterproofing plastic concretes without a catalyst. In this way, the consumption of raw material is greatly reduced, which cuts the cost of the plastic concrete. quick-hardening plastic concretes can be used to produce thin-walled high-strength pipes and large-size waterproofing panels. For joining the untreated panels the joint is subjected to the action of polyresonance oscillations. [Abstracter's note: Complete translation.]

Card 1/1

Chem Abs

v.48 25 Jan 54

Botany

Participation of microorganisms of the rhizosphere in the supply to plants of organic compounds of sulfur. G. M. Shavlovskii. *Doklady Akad. Nauk S.S.R.* 91, 1213-16 (1953).—Expts. with  $S^{35}$ -labeled methionine on seedlings of barley, corn, and peas showed that the plants are able to absorb this amino acid readily, with greatest accumulation in the roots, under sterile conditions. Expts. with *Pseudomonas aurantiaca* showed that its activity results in accumulation of org. and inorg. S derivs. Cultures on  $Na_2S^{35}O_4$  gave cells with high count of  $S^{35}$ . The grown organisms were planted in the sugar-inorg. medium and were shown to produce 55-75.9% org. S derivs. in the medium; these were identified chromatographically as cystine-cysteine; these had considerable  $S^{35}$  activity, while the inorg. S had little  $S^{35}$ . The autolyzates were added to cultures of barley seedlings, which resulted in selective uptake of  $S^{35}$  by the root systems, with transmission through the plant. Use of live cultures of  $S^{35}$ -labeled *P. aurantiaca* gave similar results.  
G. M. Kosolapoff

SHAVLOVSKIY, G. M.

"Rhizosphere Microorganism Participation in the Vitamin and Amino Acid Nourishment of Plants." Cand Biol Sci, L'vov U, L'vov, 1954. (RZhBiolKhim, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)

SO: SUM No. 556, 24 Jun 55

SHAVLOVSKIY, G.M.

Participation of microorganisms of the rhizosphere in the supply of plants with vitamins. (G. M. Shavlovskiy). *Doklady Akad. Nauk S.S.R.* 93, 1101-4 (1954); cf. *C.A.* 48, 8192. — Typical inhabitants of the rhizosphere, such as *Pseudomonas fluorescens*, *P. aurantiaca*, *Agrobacterium radiobacter*, and *Bacterium herbicola* synthesize and eliminate vitamin B<sub>1</sub>, biotin, vitamin B<sub>6</sub>, and nicotinic acid. *P. aurantiaca* is particularly active. Pea, corn, and buckwheat plants under sterile conditions are able to take up vitamin B<sub>1</sub> (labeled with S<sup>35</sup>) which is then located both in the roots and the upper parts of the plants. Younger plants generally accumulate the vitamin in the leaves, older ones in roots and stems, although these effects may be a consequence of the beginning of intense synthesis of the vitamin in the leaves, followed by its transfer. Despite the synthetic activity, the plants continue to take up the vitamin from the nutrient medium. When S<sup>35</sup>-labeled vitamin B<sub>1</sub> was introduced into the cells of *P. aurantiaca*, *Torulopsis latvia*, and *Rhodotorulopsis rubra* and the washed specimens were introduced as a suspension onto sterilized seeds of buckwheat which were then grown in sand cultures, the plants accumulated measurable amounts of S<sup>35</sup> in all parts; *P. aurantiaca* gave the most transfer. *T. utilis* and mixts. of *P. fluorescens*, *A. radiobacter*, and *B. herbicola* gave somewhat lower degree of vitamin transfer (again traced by S<sup>35</sup>).  
G. M. Kosolapoff

Inst. Microbiology, AS USSR

SHAVLOVSKIY, G. M

"Role of Microorganisms of Rhizospheres in Vitamin and Amino Acid Nourishment of Plants," edited by A. A. Imshenetskiy, Corresponding Member, Academy of Medical Sciences USSR, Moscow, Publishing House of the Academy of Sciences USSR, 1955, 239 pp

Sum 1467

SHAVLOVSKY, G. M.

*✓* Effect of iron on biosynthesis of riboflavin (vitamin B<sub>2</sub>) by *Candida guillermondi*. G. M. Shavlovskiy and V. S. Chistyakova (I. Franko State Univ., Lvov). *Doklady Akad. Nauk S.S.R.* 111, 887-9 (1956).—Addition of Fe to the culture medium (from 0.1 to 0.11 γ/ml.) lowers the yield of riboflavin with a slight retardation of growth of the yeast and shows a reduction of the rate of formation of riboflavin. In Burkholder medium the increase of Fe even to 1 γ/ml. does not tend to destroy the already existing riboflavin, and the normal content of catalase activity in the cells. The organism tends to acidify the culture during growth, with pH drop to 2-2.5 being observed in several days, when Fe content is kept low and the riboflavin production is at high level. Among the acids, citric acid was identified.

G. M. Kosolapoff

SHAVLOVSKIY, G.M.

Stimulation of riboflavin synthesis in the yeast *Candida guilliermondii* in the presence of iron in the culture medium [with summary in English]. *Mikrobiologija* 27 no.6:692-697 N-D '58. (MIRA 12:1)

1. L'vovskiy gosudarstvenny universitet.

(MONILIA, metab.

guilliermodii, riboflavin synthesis in presence of  
iron (Rus))

(VITAMIN B<sub>2</sub>, metab.

Monilia guilliermondii, synthesis in presence of  
iron (Rus))

(IRON, eff.

on Monilia guilliermondii synthesis of vitamin  
B<sub>2</sub> (Rus))

17(3)

AUTHORS: Slavlovskiy, G. M., Bogatchuk, A. M. SOV/2o-123-6-33/50

TITLE: Synthesis of Coproporphyrin by the Yeasts Candida Guilliermondii (Sintez koproporfirina drozhzhami Candida guilliermondii)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 6,  
pp 1077 - 1080 (USSR)

ABSTRACT: The porphyrins, either in combination with metals (iron or manganese) or free, take part in highly important redox reactions of the cells: photosynthesis and respiration. Free porphyrins were found in bacteria, mold fungi and yeast fungi (Refs 1,8). It is mostly coproporphyrin that can be accumulated both in the cells and in the culture medium. The formation of higher amounts of coproporphyrin usually occurs as a consequence of a disturbed synthesis of hematine or of bacteriochlorophyll or as a consequence of an iron deficiency in the culture medium (bacteria) (Ref 7). In yeasts, the insufficient supply of riboflavine to the cells (Ref 10) is said to be the cause of it. The authors prove in their paper that some

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Synthesis of Coproporphyrin by the Yeasts *Candida*  
*Guilliermondii*

SOV/2c-123-6-33/50

yeast fungi accumulate coproporphyrin in spite of an intense riboflavine synthesis. Thus some other causes for the porphyrin formation than riboflavine deficiency may exist. The yeast species mentioned in the title (ATCC 9058) was cultivated on a sugar-mineral culture medium of Berkhol' der which glycocoll and a sufficient iron quantity. In addition to the disappearance of the cytochromes from the cells a substance which was red fluorescent in ultraviolet rays was accumulated which was determined as coproporphyrin (Refs 6,8). The elimination of glycocoll from the culture medium (Table 1) as well as certain other culture media led to a decrease or even to a stop in the coproporphyrin formation. A subspecies of this yeast species, *C. guilliermondii* var. *membranaefaciens*, further *Saccharomyces ellipsoideus* 465 did not form considerable coproporphyrin amounts under similar conditions (Fig 2). It becomes more and more convincing that the same low-molecular weight precursors, e.g. glycocoll (Refs 7,9), take part in the formation of the prophyrrins, of the riboflavine and of vitamin B<sub>12</sub> in certain stages of the synthesis. The pheno-

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Synthesis of Coproporphyrin by the Yeasts *Candida Guilliermondii*

SOV/20-123-6-33/50

menon of "porphyria" in microbe—"hypersynthesizers" of these vitamins points, according to the authors' opinion, to an increased lability of the metabolism which is connected with the formation of heterocyclic compounds. *C. guilliermondii* synthesize considerable quantities of the III isomer of the coproporphyrin. It is accumulated in the vacuole apparatus of the cells. The yeast autolysate stimulates the formation of coproporphyrin. There are 2 tables and 12 references, 1 of which is Soviet.

ASSOCIATION: L'vovskiy gosudarstvennyy universitet im. Iv. Franko (L'vov State University imeni Iv.Franko)

PRESENTED: July 11, 1958, by V. N. Shaposhnikov, Academician

SUBMITTED: July 2, 1958

Card 3/3

SHAVLOVSKIY, G.M.

Effect of iron on the riboflavin synthesis and respiratory systems  
of *Candida guilliermondii* yeasts. Trudy Inst. mikrobiol. no. 6:157-  
164 '59.  
(MIRA 13:10)

1. L'vovskiy gosudarstvennyy universitet im. I. Franko.  
(CANDIDA GUILLIERMONDII)

SHAVLOVSKIY, G.M.; BOGATCHUK, A.M.

Causes of coproporphyrin accumulation in cultures of the yeast  
Candida guilliermondii. Biokhimiia 25 no.6:1043-1048 N-D '60,  
(MIRA 14:5)

1. Chair of Plant Physiology and Biochemistry, State University,  
Lvov.

(COPROPORPHYRIN) (YEAST)

SHAVLOVSKIY, G. M. and FIKTASH, I. S.

"Some Features of Flavinogenesis in Yeast Cell,"

report presented at the IUB, Fifth Intl. Congress of Biochemistry,  
Moscow, 10-16 Aug 1961

paper available

SHAVLOVSKY, G. M., FIKTASH, I. S., (USSR)

"Features of the Flavin Synthesis by Yeast Cells."

Report presented at the 5th Int'l. Biochemistry Congress,  
Moscow, 10-16 Aug 1961.

SHAVLOVSKIY, G.M.; TSARENKO, Ye.M.; FIKTASH, I.S.

Characteristics of flavine synthesis by the yeast *Candida*  
*tropicalis* var. *rhagii*. Dokl. AN SSSR 142 no.4:940-943  
F '62. (MIL 15:2)

1. Lvovskiy gosudarstvennyy universitet im. I. Franko.  
Predstavлено академиком V.N.Shaposhnikovym.  
(RIBOFLAVINE)  
(CANDIDA TROPICALIS)

SHAVIVUSKIY, G.M.; KSHEFMINSKAYA, G.P.

Vitamin requirements of Candida yeasts. Mikrobiologija 34 no.1:  
53-60 Ja-F '65. (MIRA 18:7)

I. Lvovskiy; ordena Lenina gosudarstvennyy universitet imeni  
I. Franko.

SHAVLOVSKY, G.M., LOVINENKO, Yu.M., AND MENKO, L.I.

Modified method of determining lectin with the help of *Candida*  
*toruloides* SK-4 yeast. Prikl. biokhim. i mikrobiol. 1 no.4:452-  
460. Pl.-Ag 165. (MIRA 18:11)

I. Katedra mikrobiologii Naukovo-tekhnicheskogo universiteta  
imeni Ivana Franka.

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"Results of the observations of radioemission of Venus in 1961"

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VSEKHSVATSKY, Sergey K., Head of the Chair of Astronomy, Kiev State University [1961 position] - "Nature of Saturn's rings and signs of the existence of a ring around Jupiter"

YEZERSKY, V. I., and BUDANOVSKY, N. P., Director, Kharkov Astronomical Observatory, Kharkov State University [1960 position]- "Optical properties of the atmosphere and surface of Mars according to photometric and spectrophotometric observations carried out at the Kharkov University Observatory"

Report to be submitted for the 11th Int'l. Colloq-Selenia, Belgium, 9-11 Jul 1962.

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Observations of the radio emission of Venus and Jupiter at  
the 3,3 cm.wavelength. Astron.zhur. 39 no.6:1083-1088  
N-D '62. (MIRA 15:11)

1. Fizicheskiy institut im. P.N. Lebedeva AN SSSR.  
(Radio astronomy) (Venus (Planet))  
(Jupiter (Planet))

SHANIAVSKY, S. S.: Master Tech Sci (Miss) -- "Investigation of the problem  
of hydraulic transport and hydraulic leading of the tailings of dressing plants".  
Moscow, 1953. 22 pp (Main Admin of Sci Res and Design Organizations of the Sec-  
plan USSR, All-Union Sci Res Coal Inst VUGI), 150 copies (KL, No 6, 1953, 177)

SHAVLOVSKIY, S.S., inzh.

~~Experimental investigation of the kinematic structure of sludge flow in pans. Ugol' 33 no.6:16-20 Je '58. (MIRA 11:6)~~  
(Hydraulic mining) (Fluid mechanics)

KRIVOBOK, K.P., inzh.: SHAVLOVSKIY, S. S., inzh.

Hydraulic gravity haulage of rock in hydraulic mines. Ugol' Ukr.  
4 no.9:23-25 S '60. (MIRA 13:10)  
(Hydraulic mining) (Mine haulage)

SHAVLOVSKIY, S.S., inzh.

Experimental determination of the numerical value of the coefficient  
of consumption. Ugol' Ukr. 5 no.5:18-19 My '61. (MIRA 14:5)

1. Institut gornogo dela AN SSSR.  
(Hydraulic mining) (Water jet)

"APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001548720013-0

J.A. GORDON, Ph.D.,

"Depression of the depolarizing activity of a cell from selective blocking by G-protein,"  
J.M. J.M., 76, No. 5, 1981, Inst. Physiology, Dept. Biol. Sci., -195--.

APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001548720013-0"

"APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001548720013-0

GALAYEV, N.Z.; SHAVLYGIN, A.I., dots., red.

[Ore drawing] Vypusk rudy. Leningrad, Cornyi in-t,  
1964. 47 p. (MIRA 18:7)

APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R001548720013-0"

SHAVLYUGA, N. L.

The adjusting of semiautomatic gear cutters Leningrad, Gos, nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1940. (Mic 53-375) Collation of the original as determined from the film: 363 p.

Microfilm T-12

1. Gear-cutting machines. 2. Machinery, Automatic.

SHAVLYUGA, N. I.

36169 Osnovnyye naprovleniya v proyektirovaniu spetsializirovannykh stankov. V. cb:  
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SO: Letopis' Zhrurnal'nykh Statey, No. 49, 1949

PHASE I

TREASURE ISLAND BIBLIOGRAPHICAL REPORT AID 750 - I

BOOK

Call No.: AF384255

Author: SHAVLYUGA, N. I.

Full Title: KINEMATIC SETUP IN METAL-CUTTING MACHINES

Transliterated Title: Kinematicheskiye tsepi metallurgicheskikh stankov

PUBLISHING DATA

Originating Agency: None

Publishing House: State Scientific and Technical Publishing House  
of Machine Building and Shipbuilding Literature  
(MASHGIZ)

Date: 1950 No. pp.: 288 No. of copies: 8,000

Editorial Staff: Kucher, I. M., Kand. of Tech. Sci. - Editor  
Sobolev, N. P., Prof. - Appraiser

PURPOSE: This book was written to assist technicians and foremen who  
are engaged in setting, adjusting and tuning-up metal-cutting  
machines and may be used as a textbook by senior technical  
school students in their study of theory of kinematic drives.

TEXT DATA

Coverage: This book presents an exhaustive analysis of the motion  
of various members and drives in some basic type Soviet metal-  
working machines. It describes the development and designs and  
analyses the machine-tool kinematics, i.e. the arrangement of  
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Kinematicheskiye tsepi metallurgicheskikh stankov

AID 750 - I

interdependent parts and mechanisms. It indicates the method for their adjustment, their mutual dependence and their characteristics. The book presents kinematic diagrams for ordinary and more complicated high-speed lathes. The author devotes separate chapters to description of kinematic drives in the milling machines, in the drilling and boring machines, planning machines, semi-automatic gear-cutting machines, semi-automatic gear planning machines and semi-automats for gearing conical ring-gear planning and in the gear-grinding machines with their numerous subdivisions or variations. The text of the book is profusely illustrated with drawings and tables.

No. of References: 27, Russian; 1933-1949

Facilities: Leningrad Polytechnic Institute

2/2

~11/11/03/1, 111  
TURETSKIY, I.Yu., kandidat tekhnicheskikh nauk; SEVAST'YANOV, P.P.;  
ARDASHNIKOV, L.A., SHAVLYUGA, N.I., kandidat tekhnicheskikh nauk,  
retsenzent; MIKITIN, P.S., inzhener, redaktor

[Introduction of progressive work methods in the gear-cutting  
section; practice of the Kirov Factory in Leningrad] Vnedrenie  
peredovykh metodov truda na zuborenii uchastke; opyt Kirovskogo  
zavoda v Leningrade. Moskva, Gos. nauchno-tekhn. izd-vo mashino-  
stroit. lit-ry, 1952. 102 p. [Microfilm] (MLRA 7:10)  
(Gearing)

KOKICHEV, V.N.; PFITSYN, G.A.; SHAVLYUGA, N.I., kandidat tekhnicheskikh nauk, dotsent, redaktor; DLUGOKANSKAYA, Ye.A., tekhnicheskiy redaktor

[Gear-cutting machines; reference manual] Zuboreznye stanki;  
spravochnoe posobie. Moskva, Gos. nauchno-tekhn. izd-vo mashino-  
stroitel'noi lit-ry, 1954. 355 p. (MIRA 8:4)  
(Gear-cutting machines)

SHAVLYUGA, N.I.

ANDOZHESKIY, Vsevolod Dmitrievich; KETOV, Kh.F., professor, retsenzent;  
DOBROVOL'SKIY, V.A., professor, doktor tekhnicheskikh nauk, zasluzhennyy deyatel' nauki i tekhniki, retsenzent; PYZH, O.A., inzhener,  
laureat Stalinskoy premii, retsenzent; SHAVLYUGA, N.I., kandidat  
tekhnicheskikh nauk, dotsent, redaktor; SUKOLOVA, L.V., tekhnicheskiy  
redaktor.

[Calculations for gear drives] Raschet zubchatykh peredach. Moskva,  
Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1955. 266 p.  
(Gearing) (MLRA 8:12)

KOKICHEV, Valentin Nikolayevich; GINZBURG, Ye.G., inzhener, retsentent;  
KOLCHIN, N.I., professor, redaktor; TURETSKIY, I.Yu., kandidat  
tekhnicheskikh nauk, redaktor; SHAVLYUGA, N.I., dotsent, redaktor;  
VASIL'YEVA, V.P., redaktor izdatel'stva; POL'SKAYA, R.G., tekhnicheskiy redaktor

[Methods of finishing gear wheels] Metody otdelki zubchatykh koles.  
Pod red. N.I.Kolchina. Moskva, Gos. nauchno-tekhn. Izd-vo mashino-stroit. lit-ry. 1956. 49 p. (Bibliotekha zuboreza-novatora, no.8)  
(Gear cutting) (MLRA 10:3)

MITSENGENDLER, Mikhail Litmanovich; GINZBURG, Ye.G., inzhener, retsenzent;  
KOLCHIN, N.I., professor, redaktor; TURETSKIY, I.Yu., kandidat  
tekhnicheskikh nauk, redaktor; SHAVLYUGA, N.I., dotsent, redaktor;  
VASIL'YEVA, V.P., redaktor izdatel'stva; POL'SKAYA, R.G., tekhnicheskiy redaktor

[Basic information on gear transmission] Osnovnye svedeniia o zubochatykh peredachakh. Pod red. N.I.Kolchina. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956. 63 p. (Bibliotekha zuboreza-novatora, no.1)  
(MLRA 10:3)

(Gearing)

SHCHEGOLEV, A.V.; PARSHIKOV, V.I.; LUKASHEV, A.A.; ZAMURIY, A.D.; KUCHER,  
I.M., kandidat tekhnicheskikh nauk, dotsent, retsenzent; SHAVLYUGA,  
N.I., kandidat tekhnicheskikh nauk, dotsent, redaktor; LEVKINA, T.L.,  
redaktor; POL'SKAYA, R.G., tekhnicheskiy redaktor.

[Machines for grinding spherical surfaces] Sferoshlifoval'nye stanki.  
Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956. 114 p.  
(Grinding machines) (MLRA 9:5)

KUCHER, Iosif Mikhaylovich, kandidat tekhnicheskikh nauk, dotsent; SHAVLYUGA,  
Nikolay Ignat'yevich, kandidat tekhnicheskikh nauk, dotsent;  
BARSKIY, M.E., inzhener, redaktor; DRUZHINSKIY, I.A., kandidat  
tekhnicheskikh nauk, redaktor; SIMONOVSKIY, N.Z., redaktor izdatel'-  
stva; SOKOLOVA, L.V., tekhnicheskiy redaktor

[Automatization of machine tools; a survey of foreign technology]  
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kand.tekhn.nauk, dotsent, red.; SHAVLYUGA, N.I., kand.tekhn.nauk,  
dotsent, retsenzent; MANSYREV, I.G., inzh., red.; CHFAS, M.A., red.  
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ikh modernizatsiia i avtomatizatsiia. Izd.2-oe, perer.i dop. Pod  
obshchei red.M.A.Anserova. Moskva, Gos.nauchno-tekhn.izd-vo  
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(Lathes)

SHAVLIKA, N.I.

TURETSKIY, Iosif Yudelevich, kandidat tekhnicheskikh nauk; LYUBIMKOV, Leonid Nikolayevich; CHERNOV, Boris Vasil'yevich; KOLCHIN, N.I., professor, doktor tekhnicheskikh nauk, redaktor; SHAVLIKA, N.I., dotsent, kandidat tekhnicheskikh nauk, redaktor vypuska; GOFMAN, Ye.K., redaktor izdatel'stva; ANDOZHESKIY, V.D., kandidat tekhnicheskikh nauk, dotsent, rezensent; POL'SKAYA, R.G., tekhnicheskiy redaktor.

[Making of very precise gearing] Izgotovlenie osobo tochnykh zubchatykh peredach. Pod obshchey red.N.I.Kolchina. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit.lit-ry, 1957. 179 p. (Bibliotekha zuboreza-novatora, no.6)

(MLRA 10:5) 6

(Gearing)

SHAVLYUGA, I.I.

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A.A., kand.tekhn.nauk, dotsent, retsentenz; SHAVLYUGA, N.I., .kand.  
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SPERANSKAYA, O.V., tekhn.red.

[Gear-cutting machines; a handbook] Zuboreznye stanki; spravochnoe  
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(Gear-cutting machines)

SPAIN. M. N. F.

MARKOV, Arkadiy L'vovich; KONOVALOV, Nikolay Petrovich; KOLCHIN, N.I., prof.,  
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dots., kand. tekhn. nauk, red.; VOLOSEVICH, P.P., inzh., retsenzent;  
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[Checking gear wheels] Kontrol' zubchatykh koles. Pod red. N.I.  
Kolchina. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry,  
1958. 90 p. (Bibliotekha zuboreza-novatora, no.9). (MIRA 11:8)  
(Gear cutting)

25(2,7); 28(1)

PHASE I BOOK EXPLOITATION

SOV/3205

Shavlyuga, Nikolay Ignat'yevich

Avtomatizatsiya v zuboreznom dele (Automation of Gear Cutting) Moscow,  
Mashgiz, 1958. 104 p. (Series: Bibliotekha zuboreza-novatora, vyp. 10)  
10,000 copies printed.

Gen. Ed.: N.I. Kolchin, Doctor of Technical Sciences, Professor; Editorial Board:  
N.I. Kolchin (Chairman), I.Yu. Turetskiy, Candidate of Technical Sciences,  
and N.I. Shavlyuga, Candidate of Technical Sciences, Docent; Reviewer;  
S.G. Printsental', Engineer; Ed.: I.M. Kucher, Candidate of Technical  
Sciences, Docent; Managing Ed. for Literature on the Design and Operation  
of Machinery (Leningrad Division, Mashgiz): F.I. Fetisov, Engineer; Ed. of  
Publishing House: N.Z. Simonovskiy; Tech. Ed.: R.G. Pol'skaya.

PURPOSE: This booklet is intended for skilled operators and setters of gear-milling machines and foremen and process engineers in the gear-manufacturing industry.

COVERAGE: The booklet deals with partial and full automation of gear-cutting processes. Individual automatic gear-cutting machines and groups of automatic  
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## Automation of Gear Cutting

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10.	Gear shaper with program control for cutting unrounded gears	34
11.	Gear-grinding machine with automatic operating cycle	36
12.	Automatic feeding of gear-milling and gear-shaving machines	44
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14.	Selection of the basic parameters of products for the automation of setup correction	57
15.	Manufacturing-tolerance zone	59
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17.	Changes in constructions of gear-milling machines	63

Card 3A

VYGODER, Mikhail Izrailevich; MITSENGENDLER, Mikhail Litmanovich; KOLCHIN, N.I., prof., doktor tekhn.nauk, red.; TURETSKIY, I.Yu., kand. tekhn.nauk, red.; SHAVLYUKA, M.L., dotsept, kand.tekhn.nauk, red.; KUCHER, I.M., kand.tekhn.nauk, retsenzent; VASIL'YEVA, V.P., red. izd-va; POL'SKAYA, R.G., tekhn.red.

[Calculations and examples of adjustments of gear planing and shaping machines] Raschet i primery nalogok zubodolbeznykh i zubostrogal'nykh stankov. Pod red. N.I. Kolchina. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 117 p. (Biblioteka zuboreza-novatora, no.4) (MIRA 12:2)  
(Gear-cutting machines)

SHAVLYUGA, Nikolay Igant'yevich, kand.tekhn.nauk dots.; VYGODER, Mikhail Izrailevich, inzh.; KOLCHIN, N.I., prof. doktor tekhn.nauk, red.; TURETSKIY, I.Yu., kand.tekhn.nauk, red.; KUCHER, I.M., kand. tekhn.nauk, dots., red.; VASIL'YEVA, V.P., redaktor izd-va; POL'SKAYA, R.G., tekhn.red.

[Design and examples of repairing gear-cutting and slot cutting machines] Raschet i primery maladok zubofrezernykh i shlitsefre-zernykh stankov. Pod obshchhei red. N.I.Kolchina. Moskva, Gos. nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1958. 169 p. (Bibliotekha zuboreza-novatora, no.3) (MIRA 11:5)  
(Gear-cutting machines)

SOFOL'EV, Nikolay Pavlovich; RUSINOV, M.M., prof., doktor tekhn.nauk,  
retsenzent; SHAVLYUGA, N.I., kand.tekhn.nauk, dots., red.;  
LEYKINA, T.L., red.izd-va; POL'SKAYA, R.G., tekhn.red.

[Optics in metal cutting machine tools] Optika v metallorezhushchikh stankakh. Moskva, Gos. nauchno-tekhn.izd-vo mashinostroit. lit-ry. 1958. 246 p.  
(Machine tools)

KUCHER, Aleksandr Mikhaylovich; KIVATITSKIY, Mikhail Moiseyevich;  
SHAVLYUGA, N.I., kand.tekhn.nauk, red.; VARKOVETSKAYA, A.I.,  
red.izd-va; SHCHETININA, L.V., tekhn.red.

[Machine tools; brief description of kinematic systems.  
Supplement to instructional wall sheets. Series 1: Lathes]  
Metallorezrushchie stanki; kratkoe opisanie kinematiceskikh  
skhem. Prilozhenie k plakatam. Seriia 1: Tokarnye stanki.  
Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1959.  
38 p. (MIRA 13:11)

(Lathes)

KUCHER, Aleksandr Mikhaylovich; KIVATITSKIY, Mikhail Moiseyevich;  
POKROVSKIY, Antoniy Aleksandrovich; SHAVLYUGA, N.I., kand.  
tekhn.nauk, red.; VARKOVETSKAYA, A.I., red.izd-va; SHCHE-  
TININA, L.V., tekhn.red.

[Metal-cutting machine tools; brief descriptions of kinematic  
systems. Supplement to posters Set No.3: Planing, broaching,  
grinding, and gear-cutting machines] Metallorezhushchies stanki;  
kratkoе opisanie kinematischeskikh skhem. Prilozhenie k plakatam  
Seriia III: Strogal'nye, spotiazhnye, shlifoval'nye i zuboobrabaty-  
vaiushchies stanki. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroi.  
lit-ry, 1959. 46 p. [Set of posters: "Kinematic systems of  
metal-cutting machine tools."] Seriia plakatov: "Kinemati-  
cheskie skhemy metallorezhushchikh stankov." 13 diagr.

(MIRA 13:5)

(Machine tools)

25(2)

PHASE I BOOK EXPLOITATION

SOV/2980

Shavlyuga, Nikolay Ignat'yevich

Kinematicheskiye tsepi metallorezhushchikh stankov (Kinematic Chains of Machine Tools) 2d ed., rev. and enl. Moscow, Mashgiz, 1959. 363 p. Errata slip inserted. 10,000 copies printed.

Reviewer: N. P. Sobolev, Professor; Ed. of Publishing House: I. A. Borodulina; Tech. Ed.: L. V. Shchetinina; Managing Ed. for Literature on Machine-building Technology (Leningrad Division, Mashgiz): Ye. P. Naumov, Engineer.

**PURPOSE:** This book is intended for technical personnel engaged in the maintenance of machine tools. It may also be useful to students of schools of higher education studying the theory of kinematic chains and the principles of machine-tool design.

**COVERAGE:** This book deals with an analysis of basic kinematic chains of standard machine tools. It makes use of design examples to explain the method of separation of kinematic chains, the selection of design displacements, the working of equations for simple and differential chains, and the derivation of formulas for setting standard machine tools. Automatic and semiautomatic machine tools

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AVAILABLE: Library of Congress

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[Mechanization and automation of gear-cutting operations] Me-khanizatsia i avtomatizatsia v zuboreznom dele. Pod obshchey red. N.I.Kolchina. Izd.2. Moskva, Mashgiz, 1962. 91 p.  
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(Gear cutting--Technological innovations)  
(Automation)

KUCHER, Aleksandr Mikhaylovich, kand. tekhn. nauk; KIVATILSKIY,  
Mikhail Moiseyevich; POKROVSKIY, Antoniy Aleksandrovich;  
FEDOTENOK, A.A., doktor tekhn. nauk, retsenzent; TSYPKIN,  
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nauk, red.; VARKOVETSKAYA, A.I., red. izd-va; LEYKINA,  
T.L., red. izd-va; KUREPINA, G.N., red. izd-va; SHCHETININA,  
L.V., tèkhn. red.

[Machine tools; album of general design; kinematic diagrams  
and units] Metallorezhuschchie stanki; al'bom obshchikh vi-  
dov, kinematičeskikh skhem i uzlov. Pod obshchei red. A.M.  
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BARUN, Vladimir Abramovich; BUDINSKIY, Aron Abramovich; MITROFANOV, S.P.,  
doktor tekhn. nauk, retsenzent; SHAVLYUGA, N.I., kand. tekhn.  
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[Automatic control systems for machine tools]Sistemy avtomatiza-  
tsii stankov. Moskva, Mashgiz, 1963. 430 p. (MIRA 16:4)  
(Machine tools) (Automatic control)

SHAVLYUGA, N.I.; KOLCHIN, N.I., zasl. doyatel' nauki i tekhniki  
[REDACTED], doktor tekhn.nauk, prof., red.; TURETSKIY, I.Yu.,  
kand. tekhn.nauk, rezensent; YELESINA, O.G., inzh., red.;  
GOFMAN, Ye.K., red.izd-va; BARDINA, A.A., tekhn. red.

[Calculation and examples of the adjustments of gear-milling  
and gear-shaping machines] Raschet i primery naladok zubo-  
frezernykh i zubodolbeznykh stankov. Pod obshchei red. N.I.  
Kolchina. Moskva, Mashgiz, 1963. 136 p. (Bibliotekha  
zuboreza, no.3) (MIRA 16:7)  
(Gear-cutting machines) (Gear-shaping machines)

SOBOLEV, N.P. [deceased], VITENBERG, Yu.R., SHAVLYUGA, N.I., kand.  
tekhn. nauk, retsenzent, FIRUN, N.B., kand. tekhn. nauk,  
red., CHFAS, M.A., red izd-va, VARKOVETSAYA, A.I., red.  
izd-va; BARDINA, A.A., tekhn. red.

[Gear-cutting machines and tools used in the instrument  
industry] Zumboctrabatyvaiushchie stanki i instrumenty v  
priborostroenii, Moskva, Mashgiz, 1963. 306 p.  
(MIRA 16:10)

(Instrument industry) (Gear-cutting machines)